

Claims

1 1. An anhydrous composition for topical delivery of one or more medicaments,
2 said composition comprising:

3 (A) a penetration enhancer/solvent selected from the group consisting of alcohol,
4 propylene glycol, or a combination thereof;

5 (B) a humectant/solvent selected from the group consisting of polyethylene
6 glycol, glycerin, sorbitol, xylitol, or any combination of the foregoing; and

7 (C) an anhydrous vehicle.

1 2. A composition as defined in claim 1, wherein said penetration
2 enhancer/solvent is ethanol.

1 3. A composition as defined in claim 1, wherein said humectant/solvent is
2 glycerin.

1 4. A composition as defined in claim 1, wherein said anhydrous vehicle is an
2 alcohol which is the same as or different from said penetration enhancer/solvent.

1 5. A composition as defined in claim 1, further comprising:

2 (D) an emollient;

3 (E) a chelating agent;

(F) a pH adjuster;

(G) an antioxidant;

(H) a gelling agent;

(I) a viscosifier;

(J) a colorant;

(K) a fragrance;

(L) a UV stabilizer;

(M) a sunscreen; or

(N) any combination of any of the foregoing.

6. A composition as defined in claim 5, wherein said pH adjuster is selected from the group consisting of malic acid, lactic acid, citric acid, glycolic acid, benzoic acid, ascorbic acid, or any combination of any of the foregoing.

7. A composition as defined in claim 5, wherein said antioxidant is selected from the group consisting of propyl gallate, ascorbic acid, ascorbyl palmitate, butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), tocopherol, or any combination of any of the foregoing.

8. A composition as defined in claim 5, wherein said viscosifier is hydroxypropyl cellulose.

1 9. A composition as defined in claim 5, comprising from about 1.0 to about 50
2 percent by weight of said penetration enhancer/solvent, from about 10 to about 80 percent by
3 weight of humectant/solvent, from 0 to about 10 percent by weight of emollient and aesthetic
4 enhancer combined, from 0 to about 2 percent by weight of chelating agent and pH adjuster
5 combined, from 0 to about 2 percent by weight of antioxidant, from 0 to about 5 percent by
6 weight of gelling agent and viscosifier combined, and an anhydrous vehicle, based upon 100
7 percent by weight of total composition.

1 10. A composition as defined in claim 9, wherein said gelling agent comprises
2 hydroxypropyl cellulose in an amount of about 3 percent by weight based upon 100 percent by
3 weight of total composition.

1 11. An anhydrous composition for topical delivery of one or more medicaments,
2 said composition comprising:

3 (A) a penetration enhancer/solvent selected from the group consisting of alcohol,
4 propylene glycol, or a combination thereof;

5 (B) a humectant/solvent selected from the group consisting of polyethylene
6 glycol, glycerin, sorbitol, xylitol or any combination of any of the foregoing;

7 (C) an anhydrous vehicle; and

8 (D) one or more medicaments.

1 12. A composition as defined in claim 11, wherein said medicament is
2 solubilized.

1 13. A composition as defined in claim 11, wherein said penetration
2 enhancer/solvent is ethanol.

1 14. A composition as defined in claim 11, wherein said solvent is glycerin.

1 15. A composition as defined in claim 11, wherein said anhydrous vehicle is an
2 alcohol which is the same as or different from said penetration enhancer.

1 16. A composition as defined in claim 11, wherein said medicament is selected
2 from the group consisting of an antifungal agent, an antibacterial agent, an antiviral agent, an
3 antiacne agent, an antiaging agent, an antipruritic agent, a photoprotection agent, a skin pigment
4 modulator, a hair growth enhancer, a hair growth inhibitor, a hair removal agent, an antidandruff
5 agent, an anti-seborrheic agent, an anti-psoriasis agent, an exfoliating agent, a wound healing
6 agent, an anti-ectoparasitic agent, a serum modulator, an immunomodulator, a hormone, a
7 botanical, a moisturizer, an astringent, a cleanser, a sensate, an antibiotic, an anti-irritant, an
8 anesthetic, an analgesic, a steroid, an anti-inflammatory, a tissue healing substance, a tissue
9 regenerating substance, a vitamin, an amino acid, a peptide, a mineral, a hydroxy acid, or any
10 combination of any of the foregoing.

1 17. A composition as defined in claim 16, wherein said medicament is selected
2 from the group consisting of an antifungal agent, a retinoid, an antibiotic, a glucocorticosteroid,
3 or any combination of any of the foregoing.

1 18. A composition as defined in claim 17, wherein said medicament is an
2 imidazole.

1 19. A composition as defined in claim 17, wherein said medicament is
2 ketoconazole.

1 20. A composition as defined in claim 17, wherein said medicament is desonide.

1 21. A composition as defined in claim 17, wherein said medicament is tretinoin.

1 22. A composition as defined in claim 11, further comprising:

2 (E) an emollient;

3 (F) a chelating agent;

4 (G) a pH adjuster;

5 (H) an antioxidant;

6 (I) a gelling agent;

7 (J) a viscosifier;

8 (K) a colorant;

(L) a fragrance;

(M) a UV stabilizer;

(N) a sunscreen; or

(O) any combination of any of the foregoing.

23. A composition as defined in claim 22, wherein said pH adjuster is selected from the group consisting of malic acid, lactic acid, citric acid, glycolic acid, benzoic acid, ascorbic acid, or any combination of any of the foregoing.

24. A composition as defined in claim 22, wherein said antioxidant is selected from the group consisting of propyl gallate, ascorbic acid, ascorbyl palmitate, butylated hydroxyanisole (BHA), butylated hydroxytoluene (BHT), tocopherol, or any combination of any of the foregoing.

25. A composition as defined in claim 22, wherein said viscosifier is hydroxypropyl cellulose.

26. A composition as defined in claim 22, comprising from about 1.0 to about 50 percent by weight of said penetration enhancer/solvent, from about 10 to about 80 percent by weight of humectant/solvent, from about 0.0001 to about 20 percent by weight of medicament, from 0 to about 10 percent by weight of emollient and aesthetic enhancer combined, from 0 to about 2 percent by weight of chelating agent and pH adjuster combined, from 0 to about 2

6 percent by weight of antioxidant, from 0 to about 5 percent by weight of gelling agent and
7 viscosifier combined, and anhydrous vehicle based upon 100 percent by weight of total
8 composition.

1 27. A composition as defined in claim 24, wherein said gelling agent comprises
2 hydroxypropyl cellulose in an amount of about 3 percent by weight based upon 100 percent by
3 weight of total composition.

1 28. A composition as defined in claim 26, wherein said medicament comprises
2 antifungal agent in an amount of from about 0.05 to about 3 percent by weight based upon 100
3 percent by weight of total composition.

1 29. A composition as defined in claim 26, wherein said medicament comprises
2 ketoconazole in an amount of from about 0.5 to about 3 percent by weight based upon 100
3 percent by weight of total composition.

1 30. A composition as defined in claim 26, wherein said medicament comprises
2 ketoconazole in an amount of about 2 percent by weight based upon 100 percent by weight of
3 total composition.

1 31. A composition as defined in claim 26, wherein said medicament comprises
2 glucocorticosteroid in an amount of from about 0.0001 to about 10 percent by weight, based
3 upon 100 percent by weight of total composition.

1 32. A composition as defined in claim 26, wherein said medicament comprises
2 glucocorticosteroid in an amount of from about 0.01 to about 2.0 percent by weight based upon
3 100 percent by weight of total composition.

1 33. A composition as defined in claim 26, wherein said medicament comprises
2 desonide in an amount of about 0.05 percent by weight based upon 100 percent by weight of total
3 composition.

1 34. A composition as defined in claim 26, wherein said medicament comprises
2 vitamin in an amount of from about 0.001 to about 0.5 percent by weight, based upon 100
3 percent by weight of total composition.

1 35. A composition as defined in claim 26, wherein said medicament comprises
2 tretinoin in an amount of from about 0.02 to about 0.1 percent by weight, based upon 100 percent
3 by weight of total composition.

1 36. A composition as defined in claim 26, wherein said medicament comprises
2 antibiotic in an amount of from about 0.01 to about 10 percent by weight based upon 100 percent
3 by weight of total composition.

1 37. A composition as defined in claim 26, wherein said medicament comprises
2 erythromycin in an amount of from about 0.1 to about 3 percent by weight based upon 100
3 percent by weight of total composition.

1 38. A method for topically delivering a medicament to an animal in need of said
2 medicament, said method comprising topically administering to the animal a composition as
3 defined in claim 11.